USCMS Engineer Status Report for October 2004

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1 Work Performed This Month

I did the following work during the month of October:

1. Globus RLS + POOL work

(1). Spent a lot of time to debug the POOL Globus RLS Catalog and look at the COBRA code to make the ORCA application runn-able with POOL Globus RLS Catalog. Some code was modified in the implementation by Robert at ISI. And a short note was written for Robert to modify the implementation. (2). A Phone meeting was held between Lothar, Ann, Ian, Bill, Robert on the distributed implementation of LFN-GUID mapping in Globus RLS; (3). Attended several meetings during Dirk Duellmann's visit. Talked with him about the possibility to add Globus RLS catalog component into POOL; (4). Spent some time to write a multiple-threads performance test program to test the performance of POOL File Catalog with Globus RLS backend. I also used the existing POOL File Catalog performance program to test and compare the performance of XML, MySQL and Globus RLS File catalog.

2. Data transfer

(1). With the help from Lassi, I modified Lassi's PHEDEX script to use it with srm. Now TMDB V2 was running and able to transfer files to Fermilab. Jon and Timur helped me with the machine and various SRM issued arisen during the transfer. (2). Monitoring the data transfer during this period of time; (3). Helped Robert Harris to move the analysis test samples from cern to Fermilab;

3. gLite work

(1). Nate and I finished to transfer two data sets to Wisconsin (one is a test reconstruction data set, another is a production dataset for jetmet with 100 events); (2). I sent Nate the application Darball(a JetMet analysis program from Robert Harris) and Nate was able to run the application using the data transferred from Fermilab on Wisconsin gLite testbed;

4. Preparation for SC2004 demo

Working with Conrad, we compiled the Clarens root client for the root version used in the CMS UAF. This client is necessary for accessing the root files in the Clarens server. Late, we tried with the Clarens server at Caltech and Fermilab and both worked fine.

2 Status of Deliverables

1. Finished a multi-threads performance test program on POOL Globus RLS File Catalog; 2. Finished some performance tests on POOL FileCatalog with Globus RLS backend; 3. Able to run ORCA application using Pool FileCatalog with Globus RLS; 4. Were able to run applications on transferred data on gLite testbed at Wisconsin;

3 Plans For Next Month

1. Continue the work on POOL File Catalog with Globus RLS, hope to finish the splitted FileCatalog and put it into the POOL CVS; 2. Further testing the performance of POOL File Catalog with Globus RLS; 3. Adopt the PHEDEX script with batch capability for data transfer to Fermilab;

4 Longer Term Plans

Need talk with the management.

5 Resources Needed

No.

6 Links To Supporting Documentation

- No.